

### DUAL PNEUMATIC TIRES

Suggested as the Ideal Layout for Heavy Commercial Trucks.

"As the demand for commercial cars has begun to increase, there has been a call for the tire manufacturer to increase the efficiency in the use of this class of car," says S. C. Cole, vice-president of the Fisk Rubber Company. "This call is natural, considering that the public has been educated by the use of pleasure cars containing all the speed, lightness, durability, etc., that could well be expected."

"Inasmuch as the car makers have depended very largely on the tire makers for a satisfactory tire to aid them in the development and refinement of cars in general, and also admitting that it required the pneumatic tire in order to reach this point of refinement, it is not surprising that further to refine the commercial car a tire equipment should be demanded to help out this line."

"The first idea was that a solid tire was what was wanted and this is what has been in use on most commercial cars up to the present time. Experience, however, has taught that normal speeds cannot be attained by the use of solid tires, also that the vibration carried to all parts of the car where solid tires are used is so great as to wreck the mechanism long before a satisfactory length of life has been realized."

"It is, therefore, with the thought of making it possible successfully to carry heavy loads on pneumatic tires without making a tire so large in cross sectional diameter as to be cumbersome that the idea of mounting two or more smaller tires on the same wheel in dual or twin form has been considered."

"There is a limit of weight at which pneumatic tires, even duals, can be used, but for cars that have a capacity up to two or even two and a half tons and with the weight properly distributed it is being demonstrated that pneumatics will give good service and reduce the upkeep cost of the car sufficiently to realize a great saving when the increased daily mileage is considered."

"It will also be possible for the car manufacturer as soon as he knows that pneumatics will do the work to effect a saving in weight of the car itself and this in turn will reduce many of the vexing questions that he now has to solve."

"Assuming that this type of car is operated one-half its time without load, it is safe to figure that if the load can be reduced the wear and tear on all parts of the car will be lessened and its life will be likewise lengthened."

"A question that also has to be considered as the speed of this class of car is increased is how best to guard against accidents and consequent delays. As most of these are brought about by slipping and skidding on wet pavements in one case and by punctures and cuts in the other, the application of twin or dual tires to the rear wheels safeguard these more than anything else that has been devised up to the present time. It is possible too that in case of the puncturing of one tire for a car to be driven a considerable distance with the single tire in service so as to save delay during a single trip."

"The cost of keeping up pneumatics is also less, as in case of injury or wear to one tire only one replacement is necessary on a wheel, whereas with a solid tire a great deal of wear has taken place on the tread the diameter becomes reduced so that it becomes necessary to change both to bring about an even wearing tread surface."

"It is also possible where pneumatics are used on commercial cars to get the same efficiency out of a low powered motor as out of a high powered one with solids, and this will effect a very great saving in weight and make a much more economical car to run on both gasoline and oil consumption will be reduced as well as cost of repairs, etc."

"Taking all points into consideration, after a considerable number of experiments extending over a year or more, believe the time is near at hand when pneumatic tires will almost entirely supersede solids on cars up to and including two and a half tons carrying capacity."

### SPICELESS DIAMOND TIRES.

A Feature of Construction for Commercial Automobiles.

Spliceless construction is a feature of solid rubber tires for commercial cars exhibited by the Diamond Rubber Company. The argument is obviously that the tire cannot open at the splice and one possibility of weakness is thereby overcome. The wire mesh base tire is a leader in the Diamond group, having been made by this company since the earliest use of the motor driven vehicle for commercial purposes.

It is a quick detachable solid rubber tire, requiring no special tools for taking off or putting on the wheel. Another Diamond type is the solid rubber clincher tire manufactured especially for delivery cars and other light commercial machines. The Diamond company is very optimistic as to the future of the commercial automobile, and to give the trade and user adequate attention in supplying stocks and maintaining of a strong guarantee of satisfaction is one purpose to be fulfilled by upward of fifty service stations now being established in important centers, such as Albany, Newark, Washington, etc.

### RIFLE SHOOTING.

First Competition for Seventy-first Regiment Trophy at Seventh Regiment.

At the regular weekly meeting of the Seventy-first Regiment Rifle Club, held last Friday evening in the armory, the first competition for the Seventy-first Regiment trophy was held. Company I team came out the winner with a score of 320. The high individual score of the match was made by Lance Corporal J. R. MacGuire of Company G with a 68.

The rapid fire match drew a large entry list and the scores were the best ever made in the armory under the rapid fire conditions. The rules governing the match call for five shots from the magazine in twenty seconds at each range. Private J. K. Eales made the remarkable score of 25 off shoulder, with a total of 146.

Lance Corporal MacGuire made the same total, both scores equalling the armory record. Veterans J. P. Felt and Private A. N. Cowperthwaite of Company I qualified as experts.

Three men qualified as sharpshooters. The scores:

SEVENTY-FIRST REGIMENT TROPHY MATCH.

Company	Yds.	Yds.	Total
Company I	150	150	300
Company J	140	140	280
Company K	130	130	260
Company L	120	120	240
Company M	110	110	220
Company N	100	100	200
Company O	90	90	180
Company P	80	80	160
Company Q	70	70	140
Company R	60	60	120
Company S	50	50	100
Company T	40	40	80
Company U	30	30	60
Company V	20	20	40
Company W	10	10	20

Private J. K. Eales, Co. I, 25; J. P. Felt, Co. I, 23; A. N. Cowperthwaite, Co. I, 23.

SECOND CLASS.

Private J. A. Boudreau, Co. I, 19; J. P. Felt, Co. I, 19.

THIRD CLASS.

Private A. N. Cowperthwaite, Co. I, 19; J. P. Felt, Co. I, 19.

SHARPSHOOTER QUALIFICATIONS.

Company I, 150; Company J, 140; Company K, 130; Company L, 120; Company M, 110; Company N, 100; Company O, 90; Company P, 80; Company Q, 70; Company R, 60; Company S, 50; Company T, 40; Company U, 30; Company V, 20; Company W, 10; Company X, 0.

Company I, 150; Company J, 140; Company K, 130; Company L, 120; Company M, 110; Company N, 100; Company O, 90; Company P, 80; Company Q, 70; Company R, 60; Company S, 50; Company T, 40; Company U, 30; Company V, 20; Company W, 10; Company X, 0.

Company I, 150; Company J, 140; Company K, 130; Company L, 120; Company M, 110; Company N, 100; Company O, 90; Company P, 80; Company Q, 70; Company R, 60; Company S, 50; Company T, 40; Company U, 30; Company V, 20; Company W, 10; Company X, 0.

Company I, 150; Company J, 140; Company K, 130; Company L, 120; Company M, 110; Company N, 100; Company O, 90; Company P, 80; Company Q, 70; Company R, 60; Company S, 50; Company T, 40; Company U, 30; Company V, 20; Company W, 10; Company X, 0.

## The Blazed Trail to Tire Economy



G & J TIRE COMPANY, 1924 Broadway  
Distributors for Brooklyn, Oriental Rubber Company, 1140 Bedford Avenue

### PALM BEACH MOTOR RACES.

Seventh Annual Regatta to Be Held March 14 to 17.

The Palm Beach Power Boat Association has decided upon March 14, 15, 16 and 17 as the days for the holding of the seventh annual regatta for high speed motor boats and offers for each event of the regatta a suitable and valuable prize, in addition to the special prizes for the endurance race, the speed race and the contest for Florida designed and constructed boats.

The endurance race, which has become the classic event on Lake Worth, will be held on Friday, March 17, and there will be many starters for the coveted Palm Beach prize of \$2,500 in gold. This prize will become the bona fide property of that motor boat owner who first succeeds in winning two contests for the same.

The endurance race this year will be the second for this prize, the first leg having been won last year by the motor boat Dwyer, owned by W. F. Cochrane, Jacksonville, Fla., which boat accomplished the distance of 119.15 miles at a rate of 24.8 miles an hour. The second boat to finish, the Jack Rabbit, owned by Hugh L. W. Loughby, Jr., accomplished the distance at a rate of 23 miles an hour and finished 11 minutes and 30 seconds after the Dwyer. The Fast Gallop, owned by G. F. Padden, accomplished the distance at the rate of 20.7 miles an hour, making the four laps at a slightly slower time than the preceding nineteen, but making a splendid record for itself and its owner.

In addition to the Palm Beach grand prize the Palm Beach cup, having an intrinsic value of \$500, is for the motor boat exhibiting the highest average speed of six trials over the mile course on Lake Worth, and the association cup, also having an intrinsic value of \$500, is for the motor boat winning the contest for the Florida designed and constructed boats.

There is every indication, according to Secretary Leland Steery and the chairman of the regatta committee, Theodore D. Wells, that there will be many contestants for the prizes offered.

The officers of the association are: President, H. M. Flager, vice-president, W. K. Vanderhill, Jr., secretary and treasurer, Leland Steery, Palm Beach, Fla., and chairman of the regatta committee, Theodore D. Wells, 32 Broadway, New York.

The members of the executive committee of the association are: H. C. Ward, Harrison Moore, James K. Clark, Lucius H. L. Willoughby, H. E. Peters, and the treasurer, Clyde Yeomans of New York.

### CLEVER RIDING AT DUNDALD.

Freebooters Defeat the Hustlers in a Pushball Match.

W. E. D. Stokes, Jr., James Douglas and A. Van Ralte, banded together under the name of the "Freebooters," played a game yesterday at the Dundald Academy yesterday morning, which displayed as many clever manoeuvres as any game ever played on the tankard.

Raymond Reiss, Sam Shaw and Bob Bishop called themselves the "Hustlers," and hustled they did, but all to no purpose, for the Freebooters did not allow them to make a goal, while they placed two to the credit of their own team. W. E. D. Stokes, Jr., did some clever manipulating of the huge, unwieldy ball and made the first goal unaided.

An exhibition of expert horsemanship brought out so many recruits that the judges, Mrs. E. C. Kirkland, Miss George Whitcomb and Miss Leavessman, decided to give two ribbons of each color. Miss Margaret Tompkins, who rides astride and expertly, rode the saddle, and Miss Sophie Pond were chosen to wear the blue ribbon. Miss Vera Cushman and Miss Viola Haney rode the pommel horse, and Miss Helen Shoemaker and W. E. D. Stokes, Jr., were picked to wear the yellow. The two white ribbons went to Miss Louise Bushee and Sam Shaw.

There is a jumping contest for the young people each week, and at each performance the lars are raised slightly and the jumpers made a true suffer. The course yesterday took the horses over two rail fences, a stone wall and a hedge, and the last jump proved to be the Waterloo for most of them. Helen Shoemaker, who is one of the best riders in the ring and is absolutely fearless, she sits her horse perfectly and with splendid hands, which is much harder to acquire than a good seat. Miss Helen was riding Jack Whimpering's black pony, and she took her over the jump without a mistake, winning first prize. W. E. D. Stokes, Jr., was placed second, A. Van Ralte third and Miss Sophie Pond fourth.

### IRVING WINS AT HOCKEY.

Leads in School Tournament by Defeating Columbia Grammar.

Irvine School took the lead in the interscholastic hockey tournament yesterday morning by beating the Columbia Grammar School 2 to 0 at St. Nicholas Rink. The school now has two victories to its credit and no defeats registered. Church, rover, and Kram, left wing, scored the two goals in the last five minutes of play. The game was fast and for the most part in the favor of the Irvine. The grammar school prevented scoring until the game was almost over.

The lineup:

Team	Goal	Goal	Goal
Irvine School	Goal	Goal	Goal
Columbia Grammar	Goal	Goal	Goal

Goalkeepers: Irvine School, J. Kram; Columbia Grammar, J. Kram.

Referee: J. Kram.

Time of halves: 15 minutes.

Eastern Handicap for Wilmington.

Wilmington, Del., Jan. 14. The Eastern Handicap, one of the greatest events of the year for horse racing, will be decided next July on the grounds of the Du Pont Gun Club near Wilmington. It is second only in importance to the Grand American Handicap. The tournament will probably be held the week of July 17, during the Elks national convention at Atlantic City. It will begin Tuesday and end on Thursday. This will be the first time that such an important event for trap shooters will have taken place here.



SEE THE EXHIBIT OF  
**BOSCH MAGNETOS**  
MADISON SQUARE GARDEN  
Space 224

The exhibit of the Bosch Magneto Company which attracted throngs during the past week will remain in Madison Square Garden for the Commercial Vehicle and Motorcycle part of the Show to be held this week.

Those desiring ignition information and advice will find a competent corp of engineers at the exhibit, who will explain the care and use of Bosch Magnetos.

65% of the pleasure cars exhibited at Madison Square Garden during last week are equipped with Bosch Magnetos.

72% of the cars exhibited at the Paris Show were equipped with Bosch Magnetos.

86% of the cars and motorcycles exhibited at the Olympia Show, London, were Bosch equipped.

"Specify Bosch Ignition for your car."

**BOSCH MAGNETO COMPANY**

### FRASIMUS SWIMMERS WIN.

Defeat Stuyvesant High in Dual Meet in Brooklyn.

Frasmus Hall defeated the Stuyvesant High School swimmers by 37 points to 25 at a dual meet at the Brooklyn baths yesterday morning. Four of the seven events were won by Frasmus and a fifth would have been if H. S. Clark had not made a peculiar error in the 100 yard swim. He went off with a quick start and gained steadily over Rotham of Stuyvesant until he had a lead of half the length of the tank when he came to the fourth turn. Under the water and the association cup, also having an intrinsic value of \$500, is for the motor boat winning the contest for the Florida designed and constructed boats.

The judges regarded E. Schum of Stuyvesant as one of the best divers in the city and gave him first place by that margin. Frasmus Hall won the 100 yard swim by 41.3 points, H. S. Clark, Frasmus Hall, 41.3 points, H. S. Clark, Frasmus Hall, 41.3 points, H. S. Clark, Frasmus Hall, 41.3 points.

The summary:

20 Yard Swim—Won by A. L. Clyburn, Frasmus Hall, 20.0 points; second, B. Edgar, Stuyvesant, 21.0 points.

40 Yard Swim—Won by A. L. Clyburn, Frasmus Hall, 40.0 points; second, B. Edgar, Stuyvesant, 41.0 points.

60 Yard Swim—Won by E. Schum, Stuyvesant, 60.0 points; second, B. Edgar, Stuyvesant, 61.0 points.

80 Yard Swim—Won by E. Schum, Stuyvesant, 80.0 points; second, B. Edgar, Stuyvesant, 81.0 points.

100 Yard Swim—Won by E. Schum, Stuyvesant, 100.0 points; second, B. Edgar, Stuyvesant, 101.0 points.

120 Yard Swim—Won by E. Schum, Stuyvesant, 120.0 points; second, B. Edgar, Stuyvesant, 121.0 points.

140 Yard Swim—Won by E. Schum, Stuyvesant, 140.0 points; second, B. Edgar, Stuyvesant, 141.0 points.

160 Yard Swim—Won by E. Schum, Stuyvesant, 160.0 points; second, B. Edgar, Stuyvesant, 161.0 points.

180 Yard Swim—Won by E. Schum, Stuyvesant, 180.0 points; second, B. Edgar, Stuyvesant, 181.0 points.

200 Yard Swim—Won by E. Schum, Stuyvesant, 200.0 points; second, B. Edgar, Stuyvesant, 201.0 points.

220 Yard Swim—Won by E. Schum, Stuyvesant, 220.0 points; second, B. Edgar, Stuyvesant, 221.0 points.

240 Yard Swim—Won by E. Schum, Stuyvesant, 240.0 points; second, B. Edgar, Stuyvesant, 241.0 points.

260 Yard Swim—Won by E. Schum, Stuyvesant, 260.0 points; second, B. Edgar, Stuyvesant, 261.0 points.

280 Yard Swim—Won by E. Schum, Stuyvesant, 280.0 points; second, B. Edgar, Stuyvesant, 281.0 points.

300 Yard Swim—Won by E. Schum, Stuyvesant, 300.0 points; second, B. Edgar, Stuyvesant, 301.0 points.

320 Yard Swim—Won by E. Schum, Stuyvesant, 320.0 points; second, B. Edgar, Stuyvesant, 321.0 points.

340 Yard Swim—Won by E. Schum, Stuyvesant, 340.0 points; second, B. Edgar, Stuyvesant, 341.0 points.

360 Yard Swim—Won by E. Schum, Stuyvesant, 360.0 points; second, B. Edgar, Stuyvesant, 361.0 points.

380 Yard Swim—Won by E. Schum, Stuyvesant, 380.0 points; second, B. Edgar, Stuyvesant, 381.0 points.

400 Yard Swim—Won by E. Schum, Stuyvesant, 400.0 points; second, B. Edgar, Stuyvesant, 401.0 points.

420 Yard Swim—Won by E. Schum, Stuyvesant, 420.0 points; second, B. Edgar, Stuyvesant, 421.0 points.

440 Yard Swim—Won by E. Schum, Stuyvesant, 440.0 points; second, B. Edgar, Stuyvesant, 441.0 points.

460 Yard Swim—Won by E. Schum, Stuyvesant, 460.0 points; second, B. Edgar, Stuyvesant, 461.0 points.

480 Yard Swim—Won by E. Schum, Stuyvesant, 480.0 points; second, B. Edgar, Stuyvesant, 481.0 points.

500 Yard Swim—Won by E. Schum, Stuyvesant, 500.0 points; second, B. Edgar, Stuyvesant, 501.0 points.

520 Yard Swim—Won by E. Schum, Stuyvesant, 520.0 points; second, B. Edgar, Stuyvesant, 521.0 points.

540 Yard Swim—Won by E. Schum, Stuyvesant, 540.0 points; second, B. Edgar, Stuyvesant, 541.0 points.

560 Yard Swim—Won by E. Schum, Stuyvesant, 560.0 points; second, B. Edgar, Stuyvesant, 561.0 points.

580 Yard Swim—Won by E. Schum, Stuyvesant, 580.0 points; second, B. Edgar, Stuyvesant, 581.0 points.

600 Yard Swim—Won by E. Schum, Stuyvesant, 600.0 points; second, B. Edgar, Stuyvesant, 601.0 points.

### INTERNATIONAL FOOTBALL.

France Defeats Scotland at the Old World Game to the Surprise of All Europe.

The biggest surprise that ever occurred over a football match in the Old World cropped up recently when France played Scotland in the first Rugby international of the season. The Frenchmen won with a score of 16 points to 15, and the match has been described as one of the fastest ever seen in France. It was played at Colombes, on the grounds of the Racing Club, before a crowd of 10,000 persons, who actually went wild over the result and nearly mobbed the players when time was called.

The weather was bad and there was snow on the ground, a condition which made the handling of the ball very difficult, especially to the Scotchmen, who frequently fumbled their passes. The Scotchmen travelled in full Highland costume and were accompanied by several bagpipers who played them into the grounds and kept up the drumming while the match was in progress.

When the tide of war was going against the ladies the pipers would strike up and sing as "The Campbells are Coming." "The Highland Laddie," but all to no use. The Scotchmen played desperately, particularly in the second half, but the Frenchmen played like demons and always were more speedy at passing and running. It was the second match between France and Scotland. The first took place last year, when Scotland won easily by 27 points to 0.

The Frenchmen had the pick of all France. They took the field a man short, but sooner than take on any one but the original selection they played with fourteen men. A few minutes after the ball had been thrown into play the Frenchmen were on the defensive with the ball in their territory. As was afterward a fact, this defensive work was executed for the purpose of getting a line on the tactics of the Scotchmen. Gradually the French tactics changed and they began to attack the Scottish lines and in the open play the Scotch were outdone.

Quickly it dawned on the Scotchmen that they were in for a hard battle if the French could stay, so the men from Calcutta tried every means to score. It was no use, they were blocked at every turn by their agile opponents. At half time the score stood 11 points to 15 in favor of France. Despite the French aggressive work the Scotch forwards in the second half the French stayed to the last kick and won by 16 points to 15.

The score was: France, two goals and one dropped goal and two tries, 15 points; Scotland, one goal and two tries, 16 points; Scotland, one goal and two tries, 16 points; Scotland, one goal and two tries, 16 points.

Union was the referee and the Scotchmen admitted they were fairly and squarely beaten.

### NAVY TEAM WINS.

Pennsylvania Loses a Good Game by 32 to 23.

ANAPOLIS, Jan. 14. The Naval Academy won from the University of Pennsylvania here this afternoon by 32 to 23. The midshipmen scored first and kept the lead throughout and generally outplayed the visitors. In the first period, which ended 14 to 0, the defensive work was particularly good and the chances to shoot for goal followed clever team work and fast passing.

Hill was the star of the navy team and did the bulk of the scoring in the first period. He generally the most prolific goal getter in the first half and was blocked, but he redeemed himself by netting the ball four times in the second period. Pearce and Turner did most of the work for Pennsylvania. Pearce was a strong man on the defence and helped out his team with two field goals. One of Turner's goals was a one handed throw from the centre of the court which brought out prolonged applause from the navy gallery.

Willie Loftus of Glen Ridge, N. J., was a newcomer who surprised the skating enthusiasts yesterday at the St. Nicholas Rink by winning the race for midge school-boys in a manner which indicated that it was not the first time that he had been a participant in ice races. It developed afterward that although only a school-boy he is considered one of the fastest skaters on Verona Lake and has won several prizes in junior events in outdoor races.

Vieth of Dwight School, the winner of the senior race, had his patience rewarded after trying for three years to capture one of the medals. Larry Barnett, the boy champion, would probably have won the race except for a fall he sustained just as he was passing the leaders.

Quarter Mile Race, Junior. Won by W. Loftus, Glen Ridge, N. J., 70 yards; C. Smith, Brown School, 70 yards; second, W. French, Manhattan Institute, 50 yards; third, Time, 54.2 seconds.

Half Mile Race, Seniors. Won by J. Vieth, Dwight School, 160 yards; J. Jenkins, Public School 186, 110 yards; second, J. Blum, De Witt Clinton High School, 160 yards; third, Time, 1 minute 46.1 seconds.

Write for particulars.

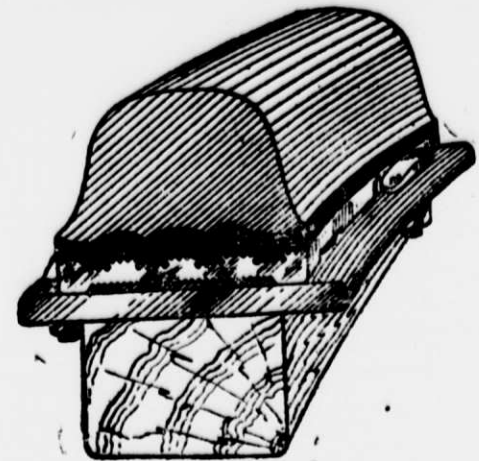
Bissinger Gymnastic Coach at N. Y. U.

The gymnastic management at New York University had been getting on this year without a regular coach in view of the order of the executive committee's action a month ago, but two weeks ago Manager Franklin G. Russell circulated a paper among the alumni and his assistants likewise working on the campaign to raise funds. Two weeks of this work resulted last week in the reorganization of John F. Bissinger, the former coach who put out the champion ship team in 1907. Mr. Bissinger met last week a lot of raw material. Next Saturday the team will journey down to Haverford to participate in an exhibition to be given there by five colleges, Yale, Princeton, Pennsylvania, Haverford and New York.

# The GOODRICH WIRELESS TIRE

## For MOTOR TRUCKS

BUILT ON STEEL



WEAR LIKE STEEL

The construction of the Wireless Tire absolutely eliminates the Factor which causes the Breakdown of all other Types of Tires—Internal Friction of the Rubber over Metal Fastening Devices.

Note the following distinguishing Characteristics of the Wireless Tire:

The Steel Base is positively keyed to the Steel Rim of the Wheel.

The Hard Rubber Sub-Base is inseparably vulcanized into the dove-tailed Grooves of the Steel Base.

The Soft Resilient Tread cannot be torn from the Hard Rubber Sub-Base.

Unlike the so-called Flange, or bolted-on Types, the Wireless Tire does not weaken the Wood Felloes by perforating them with Bolt Holes.

**Wireless Tires give twice the mileage of ordinary Solid Truck Tires.**

We cordially invite you to call upon us at the

## MADISON SQUARE GARDEN SHOW

to examine our perfected product in our Display and upon Trucks of Leading Motor Truck Manufacturers.

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